A-5

Notice of Allowability	Application No.	Applicant(s)	
	09/620,708	KODAMA ET AL.	
	Examiner	Art Unit	
	John S. Chu	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *11/21/03*.

2. ☒ The allowed claim(s) is/are *1-25*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

John S. Chu
Primary Examiner
Art Unit: 1752

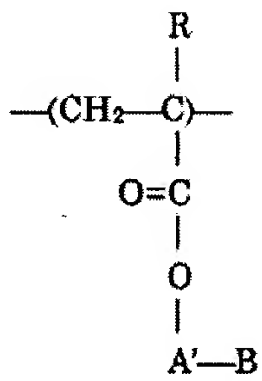
REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The claimed invention is drawn to the following:

1 (Amended). A positive photoresist composition comprising:

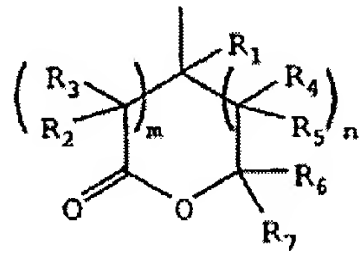
(A) a compound capable of generating an acid upon irradiation with actinic rays or radiation and

(B) a resin capable of decomposing under the action of an acid to increase the solubility in alkali, containing a repeating unit represented by the following formula (AI):



(AI)

wherein R represents hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group having from 1 to 4 carbon atoms, A' represents a single bond and B represents a group represented by formula (I):



(I)

wherein R_1 represents hydrogen atom or an alkyl group having from 1 to 4 carbon atoms, which may have a substituent, R_2 to R_7, which may be the same or different, each represents hydrogen atom, an alkyl group which may have a substituent, a cycloalkyl group which may have a substituent or an alkenyl group which may have a substituent, provided that at least one of R_6 and R_7 is not a hydrogen atom and R_6

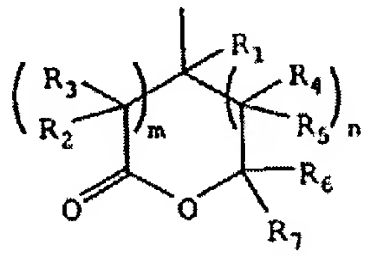
and R_7 may combine to form a ring, and m and n each independently represents 0 or 1, provided that m and n are not 0 at the same time.

9 (Amended). A positive photoresist composition for far ultraviolet exposure, comprising:

(A) a compound capable of generating an acid upon irradiation with actinic rays or radiation,

(B) a resin capable of decomposing under the action of an acid to increase the solubility in alkali, containing a repeating unit having a group represented by the following formula (I), and

(C) a fluorine-containing and/or silicon-containing surfactant:



(I)

wherein R_1 represents hydrogen atom or an alkyl group having from 1 to 4 carbon atoms, which may have a substituent, R_2 to R_7, which may be the same or different, each represents hydrogen atom, an alkyl group which may have a substituent, a cycloalkyl group which may have a substituent or an alkenyl group which may have a substituent, provided that at least one of R_6 to R_7 is not a hydrogen atom and R_6

and R_7 may combine to form a ring, and m and n each independently represents 0 or 1, provided that m and n are not 0 at the same time.

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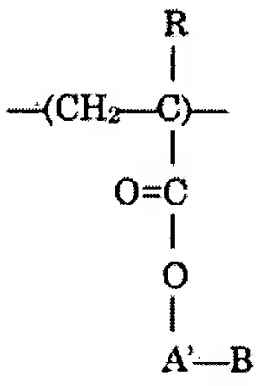
18 (Amended). A positive photoresist composition for far ultraviolet exposure, comprising:

(A) a compound capable of generating an acid upon irradiation with actinic rays or radiation,

(B) a resin capable of decomposing under the action of an acid to increase the solubility in alkali, containing a repeating unit represented by the following formula (AI), and

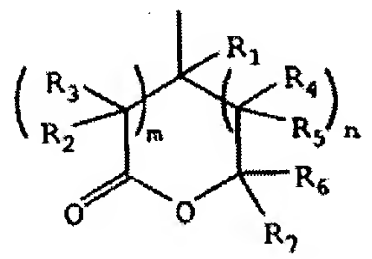
(D) a solvent containing the following solvent (a) in an amount of 60% to 90 wt % based on the entire solvent:

(a) at least one first solvent selected from propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether propionate, methyl 3-methoxypropionate, ethyl 3-methoxypropionate, methyl 3-ethoxypropionate and ethyl 3-ethyoxypropionate;



(AI)

wherein R represents hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group having from 1 to 4 carbon atoms, A' represents a single bond and B represents a group represented by formula (I):



(I)

wherein R_1 represents hydrogen atom or an alkyl group having from 1 to 4 carbon atoms, which may have a substituent, R_2 to R_7, which may be the same or different, each represents hydrogen atom, an alkyl group which may be substituent, a cycloalkyl group which may have a substituent or an alkenyl group which may have a substituent, provided that at least one of R_6 and R_7 is not a hydrogen atom and R_6 and R_7 may combine to form a ring, and m and n each independently represents 0 or 1, provided that m and n are not 0 at the same time.

The response of November 21, 2003 contains a Terminal Disclaimer, which overcomes the last outstanding issue for an obviousness-type double patenting rejection over 2002/0006576 A1 to SATO et al.

None of the prior art references of record disclose the claimed invention as recited in claims 1, 9 and 18. The inventive step in claim 1 is to the resin having the formula (AI). Claim 9 recites a resin having a group of formula (I) however also recites the presence of a fluorine-containing and/or silicon-containing surfactant, which is not disclosed in any of the references of record. Claim 18 recites the resin of claim 1 and further recites a least one first solvent as seen

above. Likewise, none of the references of record disclose the claimed invention in claim 18 as recited in the claims above.

Newly cited reference to SATO et al '655 discloses a group Y in claim 1 which meets formula (I) in claim 9, however SATO et al lacks the use of the claimed fluorine-containing and/or silicon-containing surfactants as recited. Further the references fails to disclose the claimed group of formula (AI) in claims 1 and 18.

Because none of the references of record disclose the claimed invention as recited claims 1-25 are seen as allowable and passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

The fax phone number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

John S. Chu
Primary Examiner, Group 1700

J.Chu
March 3, 2004